CHAPTER 38
Planning for pharmaceutical management

Summary 38.2
38.1 The planning process 38.2
   Why plan? • Types of planning • Planning questions and terms • Who should plan? • Good plans and good opportunities
38.2 Strategic planning 38.6
   Step 1. Create the guiding framework • Step 2. Establish the mission and vision of the organization • Step 3. Assess the current situation and environment • Step 4. Establish specific goals • Step 5. Identify strategic options • Step 6. Use defined criteria to select specific strategies • Step 7. Transform strategies into operational plans • Step 8. Assess impact and adjust strategies
38.3 Program planning 38.11
   Program-planning process • Contents of a program or project plan
38.4 Work planning 38.14
   Work-planning process • Activity-time chart • Monthly, weekly, and daily workplans • Using workplans to check progress
38.5 Project-planning methods and tools 38.17
   Management science methods • The LogFrame project-planning method • Project-planning management software
38.6 Progress review cycle 38.19
38.7 Why plans sometimes fail 38.19
Assessment guide 38.20
References and further readings 38.21

ILLUSTRATIONS
Figure 38-1 Levels of planning: the planning pyramid 38.3
Figure 38-2 Five-year program plan for promoting rational medicine use 38.12
Figure 38-3 Annual workplan (Gantt chart), first year of five-year plan 38.15
Figure 38-4 Example of an activity-time chart for a three-year program in East Africa 38.16
Figure 38-5 Critical path method (CPM) analysis of plan to upgrade central pharmaceutical supply functions 38.17
Table 38-1 The logical framework matrix 38.18

BOXES
Box 38-1 Steps in strategic planning 38.7
Box 38-2 Key elements of a strategic plan for an essential medicines program 38.9
Box 38-3 Program-planning process 38.11

COUNTRY STUDIES
CS 38-1 Establishing a multisectoral team to plan an HIV/AIDS/TB program in Tanzania 38.6
CS 38-2 Identifying administrative obstacles in Tanzania 38.13
PLANNING AND ADMINISTRATION

38.1 The planning process

Planning is the process of analyzing the current situation; assessing needs; establishing goals; setting objectives and measurable targets; and determining the strategies, responsibilities, and resources needed to achieve the expected results. Before reviewing in detail the different types of planning, it is important to consider the reasons for planning.

Why plan?

It is always possible to find reasons not to plan: “We’re too busy; we have no time for planning.” “We have no medicines and no money; there’s nothing to plan with.” “Whatever we plan is changed by the higher-ups.” Despite such constraints, good planning is essential to the success of any program or organization. When time or money is limited, planning is even more important.

Planning is a process, not simply the creation of a product (the plan). The planning process, as well as the result, is important for achieving at least six purposes—

1. To clearly identify goals: Is the organization addressing the right goals and in the right way? It is easy to continue doing the same things in the same way, but are these the best things to be done and the best way to do them?
2. To assess current needs and problems: What is the current pharmaceutical sector situation? What are the most pressing problems? (See Chapter 36 for a discussion of assessment methods.)

3. To ensure wise use of available human and financial resources: Good planning helps coordinate the use of limited resources and avoid duplication. A plan that has been agreed on becomes a commitment of available resources and gives managers more control and a basis for saying yes or no to unexpected requests.

4. To obtain additional resources: A good plan with clear objectives and expected results is useful in building support among senior officials, board members, and others in authority for obtaining additional staff or funding, and it is usually essential for donor or other external support.

5. To provide a basis for evaluating effectiveness: Without a stated plan, assessing what the organization is achieving is difficult.

6. To align staff priorities and build a sense of teamwork: The planning process can provide a forum for staff and other stakeholders to work together on a shared vision.

Nonetheless, plans can also be used to avoid responsibility for failure, especially where they have been either ill conceived or developed without the full participation of all relevant stakeholders. For similar reasons, ensuring that planning does not become an end in itself is important.

**Types of planning**

Organizations engage in three types of planning that differ in purpose, time frame, and level of detail: strategic planning, program planning, and work planning (Figure 38-1). These types of planning are discussed in more detail later in the chapter.

**Strategic planning.** Strategic planning is concerned with the long-term future of an organization and its overall effectiveness and direction in light of changing external and internal environments. This type of planning begins with a clear statement of the mission and vision of the organization. A strategic plan might follow from a comprehensive pharmaceutical sector assessment and options analysis; in any case, a strategic plan must be based on a thorough and objective assessment of the organization’s current situation—including its market, organizational strengths and opportunities, priority goals and strategies, and financial plans—and takes into account relevant experience and lessons learned from other countries or other organizations. It includes specific strategies for achieving the organization’s mission and a means of tracking progress. Strategic planning takes a long-term perspective, usually five years or more, and is less detailed than program or work planning.

**Program planning.** Program planning, sometimes called tactical-level planning, focuses on clearly defined, medium-term objectives (up to five years) within the organization’s overall long-term goals. It specifies major activities that address the objectives, responsibilities (usually by unit, not by individual), and time frame (usually by year or quarter, not by month). The time frame and level of planning are usually used for specific development assistance projects. In such instances, program planning can also serve the needs of project planning. In the context of essential medicines, program plans are sometimes called master plans. Generally, program plans should be tied to activity-specific budgets.

**Work planning.** Work planning, or operational planning, is short-term planning (usually one year or less). Annual workplans typically specify a limited set of objectives, all major activities, individual responsibilities, time frame (detailed at least to the month), indicators for monitoring and measuring progress and results, and activity-specific or task-specific budgets. Operational planning covers specific tasks, such as producing a national formulary manual for the first time, renovating a medical store, or carrying out a major public education campaign on rational medicine use. The annual workplan should contribute to the organizational mission and to the achievement of the organization’s long-term strategies and goals. In this respect, workplans are the organization’s annual building blocks.
Planning questions and terms

Whether preparing a strategic plan, a program plan, or a workplan, people engaged in the planning process address four key questions—

1. Where are we now and how did we get here?
2. Where do we want to go?
3. How will we get there?
4. How will we know when we have arrived?

Planning terminology varies considerably among organizations, countries, and programs, even though the questions are similar. What is a “goal” to one person is an “objective” or a “result” to another. Because no universally agreed-upon terminology exists, there can be no right or wrong definitions. For consistency, however, this manual uses planning terms as defined in the following paragraphs, which the reader can adapt to the local setting.

1. Where are we now and how did we get here? All planning begins with an assessment of the current situation and needs, customized for each particular context. As mentioned, Chapter 36 describes pharmaceutical sector assessment and different methods for conducting an assessment.

2. Where do we want to go? Statements of intent describe the expected measurable results of a long- or short-term plan. This description can be organized based on five levels of breadth and detail—

Mission: The mission, or mission statement, is a brief general description of the type of organization, its main purpose, and its values. The mission of an organization describes why the organization exists and provides the rationale for defining strategies and goals.

Vision: The vision statement describes where an organization wants to be in the future and creates the method for working toward that vision. The vision helps remind the organization why it is doing what it is doing and provides the big picture and the inspiration to keep it going in the face of obstacles as it strives to achieve its stated short- and long-term results (MSH 2005).

Goal: Goals describe the proposed long-term benefits the organization will bring to the people, programs, or other organizations it serves, defined in general terms. In an essential medicines program, for example, one goal might be to ensure access to safe, effective, affordable essential medicines at all public health institutions.

Objectives: Objectives are the anticipated results or outcomes defined by the organization in its long- or short-term plan, described in measurable terms, and indicating a specific period of time during which these results will
be achieved (MSH 1996). A well-formulated objective uses the SMART mnemonic—

- **Specific**—to avoid differences of interpretation
- **Measurable**—to enable monitoring and evaluation
- **Appropriate**—in relation to overall organizational mission, strategies, and goals
- **Realistic**—achievable and meaningful in terms of available human and financial resources
- **Time-bound**—with a specific time period for achieving them

An objective might be “to ensure that all medicines used in government facilities are prescribed according to national treatment guidelines within two years of introduction.”

**Expected results:** Expected results, or targets, are measurable, time-limited, intermediate progress or anticipated end points; for example, “By 2009, achieve at least 50 percent compliance with national treatment guidelines.” Milestones may also apply to process objectives; for example, “Train 600 clinicians (about 33 percent of an estimated 1,800 clinicians) in rational medicine use.”

### 3. How will we get there?

Methods for achieving specific objectives and results can also be described by using different levels of breadth and detail—

**Strategy:** a broad plan of action for fulfilling a program’s basic purpose and achieving its main goals; for example, “Promote rational prescribing through strengthening formal education, continuing education, and supervision.”

**Activity:** a specific action aimed at achieving a particular objective; for example, “Conduct a workshop on rational prescribing.”

**Task:** specific work to be performed as part of an activity and within a certain time; for example, “Prepare session notes and overhead transparencies at least four weeks before workshop.”

The inputs needed for achieving the desired objectives and results are people, time, and money. Plans should therefore describe responsibilities, schedules, and budgets, with the level of detail depending on the type of plan.

### 4. How will we know when we have arrived?

A key function of effective project management is monitoring and evaluation linked directly to the planning process. Monitoring is a continuous process that focuses on the implementation of specific activities and the achievement of targets or milestones. Evaluation focuses on achievement of objectives and expected results.

Progress toward achieving goals, objectives, milestones, and expected results should be monitored on an ongoing basis. Formal review of program plans should take place at least annually. Progress on workplans should be reviewed monthly or quarterly.

Indicators can help measure changes directly or indirectly and assess the extent to which the results and objectives of a program or project are being attained. As described in Chapter 48, indicators are an integral part of monitoring and make a useful contribution to evaluation.

### Who should plan?

The test of a plan is in its implementation; to maximize the chances of success, those involved in implementing a plan should be part of formulating it. Therefore, establishing the planning team at the outset is important. For strategic planning, the team usually consists of policy makers and senior staff members, although organizations should consider involving staff members from other organizational levels and even some beneficiaries. For program and work planning, the team should include all key people in the units concerned. Stakeholders at all levels of the organization should be identified and their roles and responsibilities in the planning process delineated. Depending on the level of complexity of the planning process and the funding available, stakeholders may include ministry of health decision makers or technical staff; development partners, such as donors or technical assistance agencies; health care providers in the public and private sectors; nongovernmental organizations (NGOs) and community groups; and patient representatives.

Planning can be top-down or bottom-up. In top-down planning, major discussions and decisions start at the top. Situation assessment and other planning data are provided by operational units, but setting goals, identifying options, and choosing among options all happen at the senior level. In bottom-up planning, the process starts with each operational unit carrying out its own planning exercise and developing a plan that is then merged with others and revised to form the overall plan.

Bottom-up planning is most appropriate for operational planning, in which the purpose and major goals are already clear. Top-down planning may be more appropriate for strategic planning, in which the basic mission and goals must be defined; however, top-down planning does require input from lower levels as well as acceptance and alignment of a plan throughout the organization after it has been completed.

Planning for pharmaceutical management is too important and specialized to be left to planning experts or outside advisers alone. National planning ministries, although they often maintain population, economic, and other forecasts to estimate program growth, are not experts on pharmaceutical management and cannot fully assess alternative pharmaceutical management strategies and solutions. Nonetheless,
Planning units and health information units have important roles, because they are usually adept at gathering and analyzing data and presenting the results.

Local or international expert advisers can make important contributions. They can provide a neutral outside perspective, bring skills in organizing and in analyzing perspectives from other countries, and make suggestions for practical alternative strategies that might otherwise be missed. In some cases, however, expert advisers may have their own agendas and may be unfamiliar with the circumstances of the program.

Multisectoral planning brings together organizations from different sectors, such as the ministry of health and ministry of finance in the public sector and a professional organization or community group in the private sector (see Country Study 38-1). It is appropriate for large-scale programs, such as planning and implementing an HIV/AIDS prevention and treatment program at the country level. Multisectoral planning enables participants to understand their interdependence, identify how they can contribute (and make a commitment to contributing), and agree on which functions will be managed in common. The planning process creates the partnerships through which activities will be carried out (Helfenbein and Severo 2004).

**Country Study 38-1**

**Establishing a multisectoral team to plan an HIV/AIDS/TB program in Tanzania**

Scaling up national prevention and treatment programs related to HIV/AIDS requires a multisectoral planning process. The government of Tanzania submitted a proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria on the theme of integrating care and support for HIV/AIDS and tuberculosis (TB). The goal of the five-year program was to decrease morbidity from HIV/AIDS and related opportunistic infections and to stabilize mortality from TB through increased access to care and support for Tanzanians benefiting from voluntary counseling and testing.

The resulting plan was unique because it included such a wide range of partners from around Tanzania—

- National AIDS Control Program
- National TB and Leprosy Control Program
- Ministry of Health facilities at the national, regional, and local levels
- Five faith-based organizations
- One parastatal organization
- Ten nongovernmental organizations
- One private-sector group
- One national association of people living with HIV/AIDS
- Two academic organizations
- Health Services of the Tanzania People’s Defense Force


Adapting plans to changing circumstances and opportunities is important. Most enlightened senior officials and donors would prefer to hear that short- or long-term plans should be modified to make better use of limited time and money than to be told eventually that by faithfully following the original plan, opportunities were missed and resources were wasted.

### 38.2 Strategic planning

Strategic planning is concerned with developing a shared vision of mission or fundamental purpose. It is concerned with the overall effectiveness and direction of the program. Fundamentally, strategic planning asks the question, Is the organization doing the right things? In contrast, program planning is more concerned with the question, Is the organization doing things the right way?

Specific questions that a strategic thinker asks are—

- What are the basic values of the organization?
- Who is meant to benefit from our services?
- What are our priority goals?
- What are the most appropriate strategies for achieving our goals?
- Is the organization appropriately structured for achieving its goals and expected results?

For example, is a goal to provide free medicines for all patients appropriate given the external and internal environments? Is a more appropriate alternative goal to ensure access to medicines for all patients, with only the poorest receiving free medicines and others paying a reasonable fee?
When weighing these goals, consider whether a large, centralized government supply system is the best way to distribute medicines to government health facilities.

When is a strategic plan needed? A strategic-planning exercise is most needed and most useful in the following situations—

**When current strategies are not working:** Organizational directors or their superiors often accept perpetually marginal or poor results simply because “we’ve always done it this way” or “nobody has thought of a better way.” Strategic planning provides a mechanism for finding better ways. For example, if the current strategy of centralized supply is failing to ensure a regular supply of medicines, the best solution may not be a project to renovate central medical stores but a strategic planning exercise to consider restructuring the supply system.

**In response to an assessment:** A comprehensive assessment of the pharmaceutical sector can identify problems and their root causes. A consensus-based options analysis can result in the need for a strategic plan to address problems.

**When the political or social environment changes dramatically:** Changes in government or replacement of senior ministry officials may offer the opportunity or result in the demand for change. The pharmaceutical sector may be affected by prevailing national trends, such as decentralization, civil service reform, or privatization. Strategic planning can help redirect an organization to adapt to such trends and take maximum advantage of opportunities for improved performance.

**When a new initiative or restructuring of programs is undertaken:** The development of a new essential medicines program, the integration of essential medicines and family planning commodities, or the creation of a division of pharmaceutical services all provide opportunities and challenges for senior officials and program managers. A strategic plan can help them respond to such changes.

**When a crisis occurs:** Not all crises create the need for a strategic plan—some crises are short-lived and do not reflect underlying deficiencies. But a major currency devaluation, a national disaster such as an earthquake or a flood, or a debt crisis may have long-term consequences that mandate new approaches.

A national pharmaceutical policy (see Chapter 4) represents a government effort to articulate new goals and strategies for the pharmaceutical sector and often results from what is effectively a strategic-planning process.

Strategic planning involves several steps, which are outlined in Box 38-1. Authors may describe these steps differently, but the basic ideas are similar.

### Step 1. Create the guiding framework

- Who will organize the work of the planning team? Who will be on the planning team? Who else will be consulted, and how will they be consulted? Why is a strategic plan being sought, and how will it be used? All these questions must be answered in establishing the guiding framework for strategic planning.

### Box 38-1

**Steps in strategic planning**

<table>
<thead>
<tr>
<th>Step 1. Create the guiding framework</th>
<th>Step 5. Identify strategic options</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Create the planning team</td>
<td>• Question everything about current structures and operations</td>
</tr>
<tr>
<td>• Identify stakeholders: the community, patients, beneficiaries, health staff members, national government, politicians, ministry of health, essential medicines program, suppliers (local industry, overseas suppliers)</td>
<td>• Think creatively</td>
</tr>
<tr>
<td>Step 2. Establish mission and vision of the organization</td>
<td>Step 6. Use defined criteria to select specific strategies</td>
</tr>
<tr>
<td>• Define or clarify mission, long-term goals</td>
<td>• Decide who chooses</td>
</tr>
<tr>
<td>• Define or clarify the vision</td>
<td>• Establish criteria for choice on the basis of information and facts</td>
</tr>
<tr>
<td>Step 3. Assess the current situation and environment</td>
<td>• Avoid bias and reflexive reactions</td>
</tr>
<tr>
<td>• Identify strengths, weaknesses, opportunities, and threats within the context of the organization</td>
<td></td>
</tr>
<tr>
<td>Step 4. Establish specific goals</td>
<td>Step 7. Transform strategies into operational plans</td>
</tr>
<tr>
<td></td>
<td>• Prepare the strategic plan</td>
</tr>
<tr>
<td></td>
<td>• Prepare program plans and work or operational plans</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Step 8. Assess impact and adjust strategies</td>
</tr>
<tr>
<td></td>
<td>Source: Adapted from Helfenbein et al. 1994.</td>
</tr>
</tbody>
</table>
The planning process lays the groundwork of support for implementation and requires identifying the key stakeholders, or those individuals and organizations with an interest in the pharmaceutical sector: ministry of health, treasury, and other ministries; the pharmacy division, the essential medicines program, health facilities, and health care providers; international agencies, bilateral donors, and development banks; local industry, overseas manufacturers, and pharmaceutical suppliers; and patients, the general public, and local communities.

Having identified the stakeholders, the next question is, How will they be involved? That is, will they be full participants, contributors to selected parts of the process, or commentators on draft plans? Chapter 4 describes various ways of seeking advice in formulating a national pharmaceutical policy.

Finally, responsibilities for the planning process must be assigned, a timetable established, and a budget prepared.

**Step 2. Establish the mission and vision of the organization**

Every organization should have a vision and a mission statement or statement of purpose that addresses at least the following questions: Why does the organization exist and who are its beneficiaries? Policy makers and program managers may assume that they know why a national pharmaceutical policy is necessary or why an essential medicines program exists. Nevertheless, it is useful to ensure that there is agreement on the mission that underlies the policy or the existence of an organization.

The mission statement for the Mission for Essential Drugs and Supplies (MEDS), a church-sponsored supply service in East Africa, for example, states—

MEDS seeks to promote health for all through the provision of essential drugs, medical supplies, training and other pharmaceutical services, guided by ethical and professional Christian values. In pursuit of this mission, MEDS has two broad objectives: to provide a reliable supply of essential drugs and medical supplies of good quality at affordable prices; and to improve the quality of patient care through training in all aspects of health and general management, with specific emphasis on the essential drugs concept and the rational use of drugs (WHO 2004).

This statement, which clearly describes the purpose and intended beneficiaries of MEDS, is made available to all MEDS staff members and the health units it serves. It mentions the quality of services, the source of funding (there will be a cost to health units), and the services provided (training as well as pharmaceutical supply).

A discussion of the purpose of an organization is needed to formulate a mission statement as well as to create a shared vision among the leadership and senior staff. For example, the following alternative mission statements for a national essential medicines program have very different implications for the management, financing, and operation of the organization—

- The purpose of the national essential medicines program is to ensure the availability, accessibility, and quality of medicines to all members of society.
- The purpose of the national essential medicines program is to provide high-quality essential medicines to the ministry of health facilities, with emphasis on ensuring access for the poor and medically needy members of society.

Mission statements may also include value statements, such as, “The national essential medicines program is based on the belief that provision of a limited list of low-cost, high-quality essential medicines is a highly cost-effective health care intervention.” Mission statements need to be communicated throughout the organization as well as to the general public and should be reviewed periodically to ensure that they remain appropriate.

Unlike the mission of the organization, which states why the organization exists, the vision provides a picture of a desired future. It describes where the group or the organization wants to be in the years to come and creates the method for working toward that vision. An organizational vision could come from the top level, such as a minister, executive director, or management team; however, a vision is more powerful when a team creates it and shares it. Because people usually are motivated to support what they help to create, organizations should try to create a shared vision that is developed and owned by those who will need to carry it out (MSH 2005).

An example of a vision might be, “Our pharmacy is known for consistently providing excellent medicines and service, and people come from all around to have us dispense their medicines. We make sure that people have the correct medicines at the correct time, and that they understand how to take their medicines properly. As a result, the people in our area are healthier and happier.”

**Step 3. Assess the current situation and environment**

Systematic assessment, as described in Chapter 36, means documenting what is going well and what is not going well and why. Increasingly, this process involves objective indicators that allow comparison of pharmaceutical sector structure, process, and performance with targets, over time, and with other countries. These indicators are important and should be included in any planning process. In the context
Planning for pharmaceutical management

of strategic planning, however, situation assessment is much broader, in that it looks at the environment surrounding the pharmaceutical sector, including the political, economic, and social environment—the context in which the program is working. A broad-based assessment also identifies options for correcting problems and analyzes their feasibility and implementation costs.

A SWOT analysis considers internal strengths and weaknesses of the organization or program, as well as external opportunities and threats. (SWOT is an acronym for strengths, weaknesses, opportunities, and threats.) SWOT analysis is an essential method for assessing the internal and external environment.

For example, a particular essential medicines program’s internal strengths may include a well-established medicine selection process, an efficient procurement office, and a series of regular workshops on rational medicine use. Internal weaknesses may include poor central and regional storage facilities and unreliable transport. For the same program, a growing private-sector distribution network may provide external opportunities for contracting out storage and transport functions. But decreasing government revenues caused by an economic downturn may represent an external threat to the program. In this example, SWOT analysis might suggest maintaining the government’s role in selecting, procuring, and promoting the rational use of medicines, but decentralizing warehousing, contracting out distribution, and encouraging local financing.

Step 4. Establish specific goals

The goals of a program or organization should follow from its mission and the functions central to achieving that mission. A strategic plan for the pharmaceutical sector may have goals related to pharmaceutical availability in government health facilities, rational medicine use, pharmaceutical quality, access to medicines in the private sector, the role of NGOs in expanding access and rational medicine use, control of medicines on the market, and local production. Examples of two goals are shown in Box 38-2.

Step 5. Identify strategic options

Perhaps the most serious mistake in strategic planning is to consider only familiar strategies or those that have been tried in the past. The greatest benefit from planning often comes from identifying practical new options. In generating new ideas, a number of tactics can be useful—

- Talk to people with relevant experience and listen to what they suggest. Although ministries of health, private health care providers, mission health services,
and various NGOs work under very different circumstances, many of the problems they face are similar. Strategies that have been successful for one may be useful to another, perhaps with modifications or adaptations.

- Learn about other programs from published reports, project evaluations, or other local sources, and international agencies, such as the World Bank or the World Health Organization's Health Technology and Pharmaceuticals section, and independent organizations, such as Management Sciences for Health.
- Visit other programs through study tours or by arranging short visits as part of regional conferences. Often the most useful lessons—both positive and negative—come from the experiences of neighboring countries. Although some question the benefit of study tours, when the right people are sent to the right places for the right reasons, study tours can be extremely effective in opening up thinking to new ideas and stimulating alternative views of the future.
- Brainstorm within the planning team. Brainstorming helps groups be more creative at all types of planning, decision making, and problem solving. Proven to be highly successful in a wide range of organizations and cultures, brainstorming is neither a free-for-all nor a formal discussion. Chapter 52 provides guidelines.
- Bring in outside expertise. Local or international advisers can be costly but may offer practical suggestions and important ideas that might have otherwise been difficult or impossible to conceive.

Identifying strategic options requires thinking creatively and questioning current strategies, structures, and operations if analysis identifies chronic deficiencies in performance or threats from actual or anticipated changes in the external environment.

**Step 6. Use defined criteria to select specific strategies**

After the full range of options has been identified, the most promising should be selected for further consideration and carefully evaluated. Final judgments should be based on information and facts, not on unfounded biases or reflexive reactions.

Who should be involved, and how should choices be made? Senior officials and those most central to the implementation process should participate in selecting specific strategies, using established criteria against which each option can be assessed.

Commonly used criteria are—

**Potential impact:** If the strategy is successful, how large an impact can be expected? For example, would shifting to international competitive bidding reduce prices by 40 to 50 percent, or by only 5 to 10 percent? Whenever possible, the potential impact should be expressed in terms of cost savings or other financial benefits.

**Political feasibility:** Successful strategy implementation is in large measure a political process. Judgments must be made about expected political support and opposition.

**Technical feasibility:** Local infrastructure capacity, available human resources, and even the state of pharmaceutical science influence technical feasibility. For example, a demand-based pull system for supplying health centers, although theoretically less wasteful than a push system, may not be feasible when most staff members have only a minimal level of education. Such a system may become feasible, however, as the general level of education and experience rises.

**Financial feasibility:** Many good ideas may be unaffordable. Financial feasibility may relate to recurrent operating costs or initial implementation costs (see Chapter 40) and may depend in part on donor interest.

**Cost-benefit:** Cost-benefit (see Chapter 10 for more details) relates the cost of a particular strategy to its potential impact on cost. A total cost analysis exercise during the assessment can help determine cost-effectiveness (Chapter 40). Usually this measurement involves approximate costs and projected, rather than actual, measures of each. Even rough estimates may provide useful insights for planning purposes.

Political will and technical feasibility help define the likelihood of success. Selecting strategies involves weighing the potential impact or benefits, if successful, against the likelihood of success and the costs of success.

**Step 7. Transform strategies into operational plans**

When strategies have been selected, the strategic plan should be put in writing. Generally, it should cover the following points as succinctly as possible—

- Mission and vision statements of the organization
- Brief assessment of the current situation: strengths, weaknesses, opportunities, threats
- Concise description of each goal for the organization
- Brief summary of each specific strategy for achieving these goals
- Monitoring and evaluation plan, including indicators for each goal

After the strategic plan has been completed, official endorsement is beneficial and is usually required. If all concerned senior officials have been involved in the process and have accepted the plan, a letter of transmittal may be sufficient. In government settings, the plan may need to be presented to a senior ministerial management committee or
even to the cabinet. In NGOs and private organizations, strategic plans may need to be endorsed by the governing body or board of directors, which may also have been involved in the planning process.

The benefits of strategic planning are felt only when the plan is implemented. Strategic plans do not include operational detail. Turning the approved strategic plan into action requires short-term planning, such as a three- or five-year program plan or project proposal, or both.

**Step 8. Assess impact and adjust strategies**

As noted, the true test of any plan is in its implementation—however, the strategic-planning process does not stop with formulation of the plan, or even with its implementation. The strategic-planning process continues through ongoing monitoring and periodic evaluation.

Perform regular assessment of the plan. Are the strategies being turned into programs and workplans? Are they having the intended effect? If not, does the problem lie with the implementation process? Are different people required? Is more time required? Is the basic goal wrong? Should it be revised? Or are the strategies themselves to blame? A strategy that is good in theory but that cannot be implemented is not a good strategy.

**38.3 Program planning**

Most planning is done at the program, project, and operational levels. Program planning focuses on clearly defined medium-term objectives within a framework of overall, long-term strategic goals. A program plan should follow from a strategic plan, national pharmaceutical policy, or national development plan. Often, however, a program plan is based on historical expectations and assumptions about the role of pharmaceutical management within the government. In addition, if a program was preceded by a pilot project, the full-scale program plan may be developed based on the experiences from its pilot. However, the two plans are not interchangeable, because a pilot plan may not adequately address the challenges of scaling up.

A government essential medicines program, a mission essential medicines service, or any other major pharmaceutical program should have a program plan, regardless of funding sources. A well-formulated plan provides direction and a framework for month-to-month and year-to-year activities; it helps coordinate staff, finances, and other resources. In the context of national essential medicines programs, program plans provide an overview of the sector and a three- to five-year plan of action and are sometimes called five-year implementation plans.

Program plans are more specific than strategic plans with respect to objectives, responsibilities, time frame, and usually, budget. They are best implemented through detailed annual or semiannual operational workplans (described below).

**Program-planning process**

Program planning usually involves a three-stage process. In the exploration phase, a planning group is formed, existing long-term goals and strategies are reviewed, and the current situation is assessed. In the formulation phase, objectives for the planning period are specified, targets and indicators are set for each objective, and resource requirements are determined. In the action phase, the program plan and budget are prepared, implemented, and monitored. Each of these three stages has distinctive operational steps, outlined in Box 38-3.

**Exploration.** The first step in program planning is to establish the planning group, usually the program manager and senior staff and representatives from other organizations, if the program is operating at the regional or national level. Experienced advisers may help guide the planning process. Representatives of international organizations, donors, and development banks often can provide useful input into the planning process, but they are generally not part of the planning team.

If a national pharmaceutical policy, national development plan, or other form of strategic plan for the pharmaceutical sector exists, broad objectives have already been developed. Even in the absence of such a plan, most national programs have some objectives toward which they
Figure 38-2  Five-year program plan for promoting rational medicine use

Goal: Rational use—ensure that medicines are rationally prescribed, correctly dispensed, and appropriately used by patients

<table>
<thead>
<tr>
<th>Objectives/activities</th>
<th>Output targets (5 year)</th>
<th>Inputs</th>
<th>Budget (U.S. dollars)</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selection</strong>—maintain an up-to-date list and information on safe, effective, affordable essential medicines.</td>
<td>Two revisions of EML</td>
<td>Meeting expenses</td>
<td>2,000</td>
<td>&lt;&lt;——&gt;&gt;</td>
</tr>
<tr>
<td>Essential medicines list (EML)—revise and distribute national essential medicines list every 2 years.</td>
<td>National formulary manual (NFM)—prepare/revise and distribute national formulary manual at least every 4 years.</td>
<td>First edition of NFM completed and distributed</td>
<td>32,000</td>
<td>&lt;&lt;——&gt;&gt;</td>
</tr>
<tr>
<td>Prescribing—ensure that medicines are prescribed according to locally recognized standards of care.</td>
<td>Four curricula designed and implemented (medicine, pharmacy, nursing, paramedical)</td>
<td>Meeting expenses, curriculum materials, books</td>
<td>5,000</td>
<td>&lt;&lt;——&gt;&gt;</td>
</tr>
<tr>
<td>Undergraduate training—ensure that all students are trained in essential medicines concept and rational medicine use in basic health curricula (amount of time depends on professional category).</td>
<td>First edition of STG completed and distributed</td>
<td>Meeting expenses, editing services, layout, printing, implementation workshops</td>
<td>48,000</td>
<td>&lt;&lt;——&gt;&gt;</td>
</tr>
<tr>
<td>Standard treatment guideline (STG)—develop/revise and distribute standard treatment manual at least every 4 years.</td>
<td>65% of clinicians trained (1,300 of estimated 2,000)</td>
<td>Workshop costs, short-term training adviser, training materials</td>
<td>42,000</td>
<td>&lt;&lt;—— ——— ——— ———&gt;&gt;</td>
</tr>
<tr>
<td>Continuing education—provide all clinicians with at least 1 week of in-service training on rational medicine use every 3 years.</td>
<td>Three operational medicine information centers (three of seven hospitals)</td>
<td>Computers, books, software, office materials</td>
<td>21,000</td>
<td>&lt;&lt;—— ——— ——— ———&gt;&gt;</td>
</tr>
<tr>
<td>Pharmaceutical information—establish a medicine information center in each teaching and provincial hospital.</td>
<td>Self-assessment methods developed and implemented at 50% of health units (150 of 300 units)</td>
<td>Short-term adviser, design workshop, implementation workshop, training materials</td>
<td>28,000</td>
<td>&lt;&lt;—— ——— ——— ———&gt;&gt;</td>
</tr>
<tr>
<td>Self-monitoring—ensure that 70% of health units conduct medicine use self-assessment at least once each quarter.</td>
<td>Packaging and labeling—ensure that at least 80% of patients receive medicines in clearly labeled containers or dispensing envelopes.</td>
<td>Packaging and labeling materials provided, sufficient for 80% of patients</td>
<td>15,000</td>
<td>&lt;&lt;——&gt;&gt;</td>
</tr>
<tr>
<td>Disposing—ensure that medicines are correctly identified, labeled, and packaged and that patients are clearly instructed on medicine use.</td>
<td>60% of pharmacy staff trained (240 of estimated 400)</td>
<td>Workshop costs, short-term training adviser, training materials</td>
<td>24,000</td>
<td>&lt;&lt;—— ——— ——— ———&gt;&gt;</td>
</tr>
<tr>
<td>Patient use—ensure that patients consume medicines as prescribed and do not use medicines in an unsafe manner.</td>
<td>Undergraduate training—ensure that all students are trained in communication and patient education methods in basic health curricula (amount of time depends on professional category).</td>
<td>Included in prescribing continuing education (see prescribing outputs)</td>
<td>(see above)</td>
<td>&lt;&lt;——&gt;&gt;</td>
</tr>
<tr>
<td>Continuing education—include skills for patient education at in-service training workshops.</td>
<td>Included in prescribing training (see prescribing outputs)</td>
<td>(see above)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional education materials—ensure that at least 80% of health units have materials for delivering 8 basic medicine-use messages.</td>
<td>Package of 8 basic medicine-use messages prepared; package introduced at 50% of health units (150 of 300 units)</td>
<td>Patient survey, short-term communication adviser, materials design, implementation workshop</td>
<td>18,000</td>
<td>&lt;&lt;——&gt;&gt;</td>
</tr>
</tbody>
</table>
have been working. These should be written down and reviewed.

Assessment of the current situation can be rather limited and impressionistic, depending on the resources available to carry it out. Whenever possible, however, assessment of the current situation should be based on monitoring data, indicators, review of progress reports, and other systematic measures described in Chapter 36.

Current problems and constraints can be identified from the systematic assessment. For major problems, a force field analysis (described in Chapter 37) may be useful to identify restraining and driving forces that must be considered if the program plan is to achieve its objectives.

Formulation. The next steps are to specify objectives, set targets, and determine resources needed to achieve each objective. As previously noted, objectives should be SMART: specific, measurable, appropriate, realistic, and time-bound.

Figure 38-2 contains an example of a five-year program plan for promoting rational medicine use. This plan, which follows from the key elements of a strategic plan outlined in Box 38-2, illustrates specific objectives that might be included.

As with problem solving (described in Chapter 37) and strategic planning (described above), one of the most critical steps in the program-planning process is identifying the full range of options. Each option should be analyzed for likely strengths and weaknesses, resource demands, and possible consequences. Country Study 38-2 shows how poor information gathering led planners to an administrative obstacle in a multisectoral plan for HIV/AIDS and tuberculosis.

Action. After objectives, priorities, and activities have been established, a draft plan should be prepared, specifying responsibilities, schedules, budgets, and a monitoring and evaluation plan with indicators, preferably according to activity. Important deadlines should be clearly identified.

First drafts of program plans usually promise too many activities in too short a time for the number of staff and amount of money available. For the plan to have any value, it must be realistic. Making a realistic plan usually means reducing the number of activities and lengthening the time frame to reflect the amount of staff time and money actually available.

The final step is to implement and monitor the plan, as described in Chapter 37, and revise it as needed based on changing circumstances or priorities.

Contents of a program or project plan

A program or project plan should include—

- A summary of the long-term goal
- Major strategies for achieving the goal
- Specific objectives
- Targets for each objective
- Responsibilities for each activity
- A schedule for each objective, in chronological order (usually by year)
- A budget for each objective or area of activity

The written plan usually consists of text and tables. A table showing activities, targets, inputs with budget amounts, and time frame is most useful, as in Figure 38-2.

Although budget figures can be included in the summary table, a separate budget is usually necessary. A program budget should indicate the area of activity (pharmaceutical supply or rational medicine use, for example), the type of expenditure (salary, medicine purchases, per diem, etc.)

Country Study 38-2
Identifying administrative obstacles in Tanzania

The multisectoral plan for care and support of those affected by HIV/AIDS and tuberculosis called for transferring funds to a variety of government ministries, faith-based organizations, national hospitals, NGOs, and private companies. The plan required a single institution to act as financial manager, holding the funds, transferring them to partners, and reporting on them to the donor in a timely fashion. Having this institution house the coordinating unit for technical execution of the program would also make sense.

One logical option was for the national AIDS commission, TACAIDS, to add these two functions to its existing roles of coordination and resource mobilization. However, the founding legislation for TACAIDS precludes the commission and its secretariat from managing financial resources other than its own operating budget because it has monitoring authority over all HIV/AIDS activities and institutions in the country. Therefore, a financial manager had to be found elsewhere.

Planners should not assume, on the basis of incomplete information, that a logical or innovative option can be implemented. It is important to first become informed about regulations, legislation, and administrative obstacles that may prevent otherwise good ideas from being realized.

38.4 Work planning

Work planning is the most detailed type of routine planning. A workplan is like a blueprint: it shows each of the smaller steps involved in achieving the larger goal. Effective managers use workplans to keep efforts focused on planned activities and to align and coordinate staff efforts in the achievement of longer-term goals. Workplans are not intended to limit staff members’ initiative, but they should help managers and staff members say no to unreasonable and unplanned requests and discourage overly optimistic promises.

A workplan is typically prepared annually to cover a twelve-month period, although some essential medicines programs do operational work planning on a six-month cycle. Compared with program plans, workplans should be more specific with respect to outputs, individual responsibilities, precise time frame, and budget requirements.

The steps for preparing an annual workplan—which are similar but not identical to those for preparing a program plan—follow.

1. Review long-term goals and existing program plans.
2. Define specific objectives for the upcoming year.
3. Set targets for each objective, and define indicators.
4. List major activities for each objective. Prepare monitoring and evaluation plan.
5. Prepare an activity-time (Gantt) chart showing the responsibility and timing for each activity.
6. Review or prepare the annual budget.
7. Revise the plan based on available staff, time, and funds.
8. Implement the plan.
9. Monitor the plan and revise as needed.

For each objective and activity, workplans generally specify major tasks involved, measurable outputs and indicators, responsibilities for each task, timing (at least to the month or quarter), budget, and source of funds for each activity or task.

Under Step 4, considering what activities are necessary for achieving each objective is important, as is not being limited to what was done last year.

Figures 38.3 and 38.4 illustrate two different types of activity-time charts (Step 5).

Step 7 is particularly important. When Steps 1 through 6 have been completed and a draft workplan exists, the plan must be reviewed carefully and finalized according to available staff, time, and funds. A plan that is unrealistic from the start will quickly lose credibility and have little value as a management tool. In addition, a plan may need to be revised several times while progress is being monitored (Step 9).

Work-planning process

Preparation of workplans must involve those who will be implementing them. Because this activity requires a focused effort without interruptions, moving out of the office for a day or more is often useful while preparing the workplan. Participants should be chosen on the basis of their knowledge and expertise as well as their commitment to making contributions. Brainstorming techniques (see Chapter 52) can be useful in generating ideas for specific activities and tasks. In any case, the tone of meetings should encourage the open exchange of ideas and creative thinking. Sometimes, informal discussions preceding the formal work-planning discussion can help staff members reflect on the preceding year, consider the reasons for recent successes and failures, and begin thinking about the next year.

Objectives, targets, activities, and tasks should be consistent with the definitions given earlier in this chapter. Responsibilities for each activity should be listed by unit or office, or sometimes by person or team. The time frame for each activity is usually set by year or quarter rather than by month.

Generally, workplans should be tied to activity-specific budgets that reflect all required inputs, including staff salaries, pharmaceutical costs, vehicle costs, and other operating costs. For government programs, routine, recurrent costs such as salary and utility expenses, may be part of larger divisional budgets and not readily separated. Certainly pharmaceutical costs and major additional costs should be noted separately.

Activity-time chart

At the center of an annual workplan is an activity-time (Gantt) chart, chronogram, or schedule of activities and responsibilities. A Gantt chart provides a clear, concise summary that is invaluable for communicating plans to staff, checking financial and other resource requirements, and monitoring progress.

A Gantt chart groups activities under objectives and usually contains a series of rows for each major activity. Typically, it contains columns for—

- The objectives and activities
- The person or unit responsible for each activity
- The time period in which the activity will occur
**Figure 38-3  Annual workplan (Gantt chart), first year of five-year plan**

**Goal:** Rational use—ensure that medicines are rationally prescribed, correctly dispensed, and appropriately used by patients

<table>
<thead>
<tr>
<th>Objectives/activities</th>
<th>Responsibility</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Jan</td>
</tr>
<tr>
<td><strong>Selection</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential medicines list (EML)—revise and distribute national EML every 2 years.</td>
<td>Director, medical services</td>
<td></td>
</tr>
<tr>
<td>Appoint national drug and therapeutics committee (NDTC).</td>
<td>Chairman, NDTC</td>
<td></td>
</tr>
<tr>
<td>Call for proposals for additions and deletions to EML.</td>
<td>NDTC</td>
<td></td>
</tr>
<tr>
<td>Hold NDTC meeting to revise EML.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prescribing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate training—ensure that all students are trained in essential medicines concept and rational medicine use in basic health curricula (amount of time depends on professional category).</td>
<td>Dean, medical school</td>
<td></td>
</tr>
<tr>
<td>Convene national workshop to outline changes in medical, pharmacy, nursing, paramedical curricula.</td>
<td>Individual training institutions</td>
<td></td>
</tr>
<tr>
<td>Organize working groups to prepare detailed core curricula for each health profession.</td>
<td>Individual training institutions</td>
<td></td>
</tr>
<tr>
<td>Support core groups at institutional level to implement curricula changes.</td>
<td>Individual training institutions</td>
<td></td>
</tr>
<tr>
<td><strong>Standard treatment guidelines (STGs)—develop/revise and distribute standard treatment manual at least every 4 years.</strong></td>
<td>Director, medical services</td>
<td></td>
</tr>
<tr>
<td>Appoint committee to coordinate drafting of manual.</td>
<td>Senior editor/chairperson of editorial committee</td>
<td></td>
</tr>
<tr>
<td>Assign writing responsibilities.</td>
<td>Individual authors</td>
<td></td>
</tr>
<tr>
<td>Complete draft treatment manual.</td>
<td>Essential medicines program (EMP) training officer</td>
<td></td>
</tr>
<tr>
<td>Distribute draft manual for review.</td>
<td>Individual training institutions</td>
<td></td>
</tr>
<tr>
<td><strong>Continuing education—provide all clinicians with at least 1 week of in-service training on rational use every 3 years.</strong></td>
<td>Dean, medical school, clinical pharmacology</td>
<td></td>
</tr>
<tr>
<td>Do needs assessment (identification of major medicine-use problems).</td>
<td>EMP training officer training consultant</td>
<td></td>
</tr>
<tr>
<td>Design continuing education (CE) programs.</td>
<td>EMP training officer training consultant</td>
<td></td>
</tr>
<tr>
<td>Prepare course materials.</td>
<td>EMP training officer training consultant</td>
<td></td>
</tr>
<tr>
<td>Conduct first CE workshop.</td>
<td>EMP training officer training consultant</td>
<td></td>
</tr>
<tr>
<td>Revise CE program and materials.</td>
<td>EMP training officer training consultant</td>
<td></td>
</tr>
<tr>
<td>Conduct second CE workshop.</td>
<td>EMP training officer and staff</td>
<td></td>
</tr>
<tr>
<td><strong>Dispensing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packaging and labeling—ensure that at least 80% of patients receive medicines in clearly labeled containers or dispensing envelopes.</td>
<td>Pharmacy school</td>
<td></td>
</tr>
<tr>
<td>Review and revise design of dispensing containers and labels.</td>
<td>EMP procurement officer</td>
<td></td>
</tr>
<tr>
<td>Include dispensing envelopes and labels in medicine tenders.</td>
<td>EMP information officer</td>
<td></td>
</tr>
<tr>
<td>Prepare circular letter/memorandum to inform dispensing staff.</td>
<td>EMP supply officer</td>
<td></td>
</tr>
<tr>
<td>Distribute envelopes and labels to health units.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Figure 38-4  Example of an activity-time chart for a three-year program in East Africa**

**Getting medicines to people—Creating sustainable private-sector drug seller initiatives: Timeline**

Goal: Create a sustainable model and strategy to replicate and scale up private-sector drug seller initiatives in developing countries that will ultimately operate independently of donor support.

<table>
<thead>
<tr>
<th>Major activities</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 1</td>
<td>1 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Activity 2</td>
<td></td>
<td>6 4</td>
<td>6 5</td>
</tr>
<tr>
<td>Activity 3</td>
<td></td>
<td>8 9</td>
<td>9 10</td>
</tr>
<tr>
<td><strong>Objective 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 4</td>
<td>11 12</td>
<td>14 15</td>
<td>16</td>
</tr>
<tr>
<td>Activity 5</td>
<td></td>
<td>17 18</td>
<td></td>
</tr>
<tr>
<td>Activity 6</td>
<td></td>
<td>19 20</td>
<td>20 21</td>
</tr>
<tr>
<td>Activity 7</td>
<td></td>
<td></td>
<td>22 23</td>
</tr>
<tr>
<td>Activity 8</td>
<td></td>
<td>24 25</td>
<td>26 27</td>
</tr>
<tr>
<td><strong>Objective 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 9</td>
<td>33 34</td>
<td>35 36</td>
<td>37 38</td>
</tr>
<tr>
<td>Activity 10</td>
<td>39</td>
<td>40 41</td>
<td>42 43</td>
</tr>
<tr>
<td>Activity 11</td>
<td>44 45</td>
<td>46 47</td>
<td>48 49</td>
</tr>
<tr>
<td>Activity 12</td>
<td>50 51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 13</td>
<td>52 53</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td><strong>Objective 4</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 14</td>
<td></td>
<td>58 59</td>
<td></td>
</tr>
<tr>
<td>Activity 15</td>
<td></td>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

**Annual budget:**

- USD 915,960
- USD 1,043,844
- USD 1,245,802

- Activities related to situation and options analysis
- Activities related to supplemental proposal (evaluation)
- Staff positions to continue without donor funding
- Activities related to building stakeholder consensus
- Activities related to monitoring and evaluating
- Activities related to implementation
- Activities related to demonstration project
- Milestones
Output targets and performance indicators for each objective may be listed separately or included as a column of the Gantt chart. Budgets should be linked to objectives and sometimes to individual activities. Often, budgets are listed in a separate part of the workplan. However, if specific funds and funding sources are associated with each activity, columns in the Gantt chart can specify the amounts and sources of funds.

Figure 38-3 shows an example of a Gantt chart for an essential medicines program. This example is based on the first year of the program plan shown in Figure 38-2. Figure 38-4 illustrates a simpler activity-timeline with program milestones.

**Monthly, weekly, and daily workplans**

An annual workplan provides major deadlines and a certain level of detail. Individual units and staff members, however, often prepare their own monthly, weekly, or daily schedules or to-do lists. This activity allows individuals to translate the workplan into short-term tasks and to set priorities to ensure that the most important tasks are being accomplished.

For example, the training officer responsible for the national workshop on undergraduate curriculum listed under “Undergraduate training” in Figure 38-3 may take this activity and prepare a one-page to-do list that contains tasks and target dates for selecting the venue, sending invitations, planning the agenda, obtaining flip charts and other training supplies, and doing other important tasks. Such lists help spread work over the available time so that staff members are not left with a large number of last-minute tasks before a major event.

**Using workplans to check progress**

To be an effective management tool, workplans must be readily accessible and frequently reviewed by managers and staff members involved in implementing them. Wall charts of the workplan in the office and copies taped to desktops can be used as consistent reminders.

Workplans should be checked regularly. When specific activities are behind schedule, a decision must be made by the concerned manager: reorganize priorities, assign additional staff or provide extra resources to get the activity back on schedule, or accept the delay.

If an annual workplan is well formulated and consistent with long-term program objectives, the performance of a program and its staff can be assessed by the extent to which it adheres to the workplan.

**38.5 Project-planning methods and tools**

Several planning methods and computer-based tools exist to help managers. These include methods derived from industrial and engineering management science, methods supported by specific donor requirements, and computer programs for project management.

**Management science methods**

For program and work planning, two commonly used methods from management science are the critical path method (CPM; see Figure 38-5) and the project evaluation and review technique (PERT). Although originally formulated as two distinct methods, their similarities are such that they are commonly referred to collectively as CPM-PERT. The combined method uses a network model to help planners arrange and schedule project activities.

The main steps for CPM-PERT planning are (1) identify all necessary tasks; (2) determine which tasks need to be completed before the next ones are started; (3) estimate the time needed for each task; and (4) combine the information from the first three steps into a diagram of the whole process. The most important benefits of the CPM-PERT method are that it forces managers to estimate realistically the time
required for each task or activity and to think carefully about the best sequence of tasks and activities. Full-scale application of the method is most common with complex construction projects, but realistic assessment of time requirements and efficient sequencing of activities should be part of any planning effort.

Each circle on the diagram in Figure 38-5 represents a task or well-defined activity that is part of the project. The number in each circle represents the expected time required to complete the task. Arrows indicate the dependencies of relationships among the tasks and show which tasks must be completed before the next can begin. Adding together all of the task times in Figure 38-5 shows that 83 weeks of work must be completed; however, several tasks can be done simultaneously. For example, when task A has been completed, B and C can be started and worked on concurrently. Therefore, the earliest completion date is estimated by looking at all possible paths through the diagram and choosing the one with tasks requiring the most total time. In this example, the longest, or “critical,” path is A–C–E–G–K–L, requiring a total time of fifty weeks.

The LogFrame project-planning method

Most donors have a required series of steps that they follow to identify, plan, implement, and monitor projects (see Chapter 14). The logical framework approach (LogFrame, or LFA) is one such planning method that has broader applications. The LogFrame approach has been used by the U.S. Agency for International Development, Danida, and other donors and organizations. The World Bank (2005) has published a guidebook on the approach.

The LogFrame approach combines all the key components of a project in one place and presents them in a systematic, concise way. LogFrame also ensures a logical inter-relatedness among project elements, highlights the influence of external factors, and provides a systematic basis for monitoring. However, the approach can lead to an inflexible project design without connection to realities in the field or changing situations. Nevertheless, if the LogFrame analysis is seen not as a final product, but rather is evaluated and updated along the way, it can provide a clear view of needs, objectives, and strategies for all involved on a continuing basis.

The written output of a LogFrame basically appears as a four-by-four matrix (see Table 38-1). Along the horizontal axis are objectives, indicators, means of verification, and assumptions; along the vertical axis are four hierarchical levels of objectives: goal, purpose, outputs, and activities. The matrix summarizes what the project should achieve; the performance questions and indicators that will be used for monitoring and evaluation; how these indicators will be monitored or where the data can be found; and assumptions, such as a secure government or the availability of funds, plus associated risks for the project if assumptions turn out to be incorrect.

### Table 38-1 The logical framework matrix

<table>
<thead>
<tr>
<th>Narrative summary</th>
<th>Verifiable indicators</th>
<th>Means of verification</th>
<th>Assumptions/risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal</strong></td>
<td>Quantitative ways of measuring, or qualitative ways of judging, achievement of broad objectives</td>
<td>What sources of information exist?</td>
<td>External factors necessary for sustaining objectives in the long term</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Quantitative measures or qualitative evidence to judge achievement and impacts (estimated time)</td>
<td>What sources of information exist?</td>
<td>External factors affecting movement of purposes toward project goal</td>
</tr>
<tr>
<td><strong>Outputs</strong></td>
<td>Performance questions and indicators for each output—output indicators</td>
<td>What sources of information exist?</td>
<td>External factors affecting movement of outputs to purposes</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td>Can include the needed inputs for activities</td>
<td>What sources of information exist?</td>
<td>External factors affecting movement of activities toward outputs</td>
</tr>
</tbody>
</table>

Project-planning management software

A number of computer programs based on variations of CPM-PERT and other planning methods can help organize operational planning and monitoring. Planning software can be useful for generating charts and schedules of different levels of detail; for determining when too much has been planned for available human or financial resources; for summarizing tasks by objective, unit, or individual; for preparing and monitoring project budgets; and for reporting on project achievements.

In practice, simple spreadsheet programs are the most commonly used software for program planning. The example in Figure 38-2 is from a spreadsheet model in which each category of essential information (such as objective or target) forms a separate column and each task or activity is given a separate row.
Computers are useful for organizing planning information, but they cannot replace clear thinking about project objectives, substitute for personal monitoring of project activities, or make planning decisions.

### 38.6 Progress review cycle

Planning represents the beginning of the management cycle. Plans must be implemented, and equally important, implementation must be monitored. When plans are made and implemented, determining how often progress will be monitored is important. The review cycles for strategic plans, program plans, and workplans are different, but they should be linked.

If formal evaluations of progress are carried out (see Chapter 48), they are typically done after two to three years. Such evaluations may focus on long-term strategic plans, program plans, or specific project plans.

Progress toward achievement of the objectives set forth in a program plan should be reviewed at least annually, whether the plan covers a three-year, five-year, or other period. If a strategic plan exists, progress toward achieving long-term goals is generally reviewed at the same time as the program plan is reviewed.

An annual program review should address the following questions—

- What progress has been made toward each objective and expected result or output?
- What are the implementation problems?
- What changes are needed in strategies, objectives, or specific activities?
- What activities should be deleted from the plan?
- What new activities must be added to achieve the original objectives?

Progress toward implementation of annual workplans should be formally reviewed at least quarterly, if not monthly. In general, the questions asked during annual progress reviews also apply to quarterly or monthly reviews of workplans.

### 38.7 Why plans sometimes fail

Good plans to guide program development and implementation require time and effort. Sometimes, however, plans exist merely on paper: they are made but never actually used. Even well-conceived, well-presented plans can remain unused.

Why are plans not implemented? If implemented, why do plans fail to achieve their intended objectives? There are many reasons, but some of the more common are—

**Unrealistic or overly ambitious planning:** Planning must be based on a realistic assessment of the current situation, clear objectives for the future, and a practical assessment of what is possible. Planning, particularly in groups, can sometimes become overly optimistic and idealistic. Planning should be forward thinking but should not confuse hopes and wishes with good judgment and decisions about what is possible.

**Failure to consider existing resources and commitments:** Plans must be made within the context and constraints of existing commitments. Although the opportunity often exists for great progress, progress takes time. Plans that propose too much in too little time may spread everyone's efforts too thinly to accomplish any of the stated objectives or may compromise the work's quality.

**Lack of involvement by the implementers:** Plans are best made at the levels where they will be carried out. Strategic plans to guide long-term policy must involve policy makers, medium-term program plans must involve program managers and key program staff members, and annual work planning must involve the people whose work is being planned. Without such involvement, plans are likely to lack both the realism and the commitment necessary for effective implementation.

**Lack of support:** Success also depends on support from others who are not directly involved in implementation. Such support may come from senior staff members and officials of ministries (such as treasury) and other governmental bodies, international organizations such as WHO and UNICEF, donors and development banks, local NGOs, and local professional societies. Selectively involving individuals from such organizations in preparing or reviewing a strategic or program plan can lay a good foundation for future support during implementation.

**Planning for the wrong reasons:** Some plans are never really meant to be implemented. Examples include plans made only for short-term political gain or to satisfy a condition for receiving a grant or a loan. Whenever possible, however, plans pushed by external needs should also suit the needs of the organization or program. If plans are sometimes made “for appearances only,” staff members should understand why this is done so that the experience does not undermine their confidence in the value of good planning.

**Lack of funds:** Nothing is more frustrating than spending considerable time and effort in planning, only to learn that funds are insufficient to carry out the plan. Planning should be based on a realistic assessment of potential funding sources.

**Lack of people or time:** Although plans are made for organizations or programs, they depend on people. Ambitious plans require more people and more capable people. But
even a plan that was realistic at the time it was made may fail if key people are transferred or otherwise become unavailable.

Wrong level of planning: Some managers and staff tend to avoid planning for themselves. They prefer planning for the people below them or making recommendations to the people above them. A fundamental principle of planning, as noted above, is that plans should be developed with the active involvement of those who are central to implementing them.

Poorly presented or overly complicated plans: Often, the clearest, most useful plans are the shortest plans. For example, an annual workplan for a national essential medicines program may consist of a one-page introduction and statement of objectives, a two-page chart of activities and time frame (Gantt chart), a monitoring and evaluation plan, a one-page budget, and one page of text describing the eight major program components. Plans that are poorly organized or overly complex or that provide excessive detail are difficult to understand, let alone implement.

Lack of follow-up and monitoring: One of the most common management failures is the failure to actually use a plan after it has been prepared. A five-year program plan such as that shown in Figure 38-2 should be reviewed regularly and used to formulate annual workplans. Annual workplans and timelines such as those shown in Figures 38-3 and 38-4 should be checked on a weekly or monthly basis. The program's monitoring system (see Chapter 48) should be linked with organizational and

<table>
<thead>
<tr>
<th>ASSESSMENT GUIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic planning</strong></td>
</tr>
<tr>
<td>• Does a strategic plan exist for the pharmaceutical sector (for example, a national pharmaceutical policy or national development plan)? Does it reflect the current political, social, and economic environment? Are its strategies appropriate and realistic?</td>
</tr>
<tr>
<td>• Did the strategic-planning process involve policy makers and senior staff? Which key stakeholders were involved or consulted?</td>
</tr>
<tr>
<td>• Did the strategic-planning process actively consider new strategic options, such as strategies used elsewhere or suggested by outside experts?</td>
</tr>
<tr>
<td>• Is the strategic plan written? Does it include mission and vision statements; a brief assessment of the current situation, including strengths, weaknesses, opportunities, and threats; a concise description of each goal and measurable results; and a brief summary of each strategy for achieving these goals? Has it been officially endorsed?</td>
</tr>
<tr>
<td>• Is the strategic plan reflected in program plans and workplans? To what extent are strategies having the intended impact?</td>
</tr>
<tr>
<td><strong>Program planning</strong></td>
</tr>
<tr>
<td>• If there is an essential drugs program or other major pharmaceutical program, is there a pharmaceutical master plan, five-year implementation plan, or other program plan?</td>
</tr>
<tr>
<td>• Does each program or project plan include a statement of the goal, strategies, objectives, targets or output, responsibilities, schedule, monitoring and evaluation plan, and budget? Does the plan include both descriptive text and summary tables?</td>
</tr>
<tr>
<td><strong>Work planning</strong></td>
</tr>
<tr>
<td>• Are program plans implemented through annual or semiannual operational workplans?</td>
</tr>
<tr>
<td>• Have program plans been used in presenting arguments for additional funding?</td>
</tr>
<tr>
<td>• Are workplans prepared annually?</td>
</tr>
<tr>
<td>• Do they specify objectives, activities, major tasks, measurable outputs or targets, individual responsibilities, timing (at least to the month), monitoring and evaluation plan, budget, and source of funds for each activity? Are workplans realistic in terms of available staff, time, and funds?</td>
</tr>
<tr>
<td>• Do workplan documents include activity-time (Gantt) charts? Are they used for monitoring?</td>
</tr>
<tr>
<td>• To what extent are implementing staff involved in the preparation of workplans? Do individual units and staff members prepare, based on the workplan, their own monthly, weekly, or daily schedules or to-do lists?</td>
</tr>
<tr>
<td><strong>Planning tools</strong></td>
</tr>
<tr>
<td>• What planning methods or computer tools (for example, CPM, PERT, LogFrame) are used to support planning efforts?</td>
</tr>
<tr>
<td><strong>Planning as part of the management cycle</strong></td>
</tr>
<tr>
<td>• After plans have been established, are they reviewed on a regular basis for implementation progress and problems? Are the review cycles for strategic plans, program plans, and workplans linked?</td>
</tr>
<tr>
<td>• Have formal assessments or evaluations been done? If so, have the findings and recommendations been incorporated into revised plans?</td>
</tr>
</tbody>
</table>
program plans. Without this link, the plan loses its value in guiding implementation.

Thus, for plans to be implemented effectively, they must be realistic, they must be developed with input from the people who will implement them, they must have sufficient support, they must have adequate resources, and they must be clearly presented.

References and further readings

★ = Key readings.


